known manner, in response to instructions from the processor 210. Further, these signals may be combined with the standard audio signal produced by the audio decoder (described above) in the auxiliary data processor 50 of an interactive TV system. When the sound representative signal and the standard audio signal are combined, the resulting signal represents the combination of the sound generated by the sound adapter and the broadcast audio signal. It is also possible to selectively combine these two sound representative signals under the control of the processor 210.

The timing of the generation and display of the graphical image and sound representative signals, may be controlled by receipt of the time code data from the data stream. This enables an executable code module to synchronize the display of processor generated image and presentation of processor generated sound to the broadcast video and audio. It is further possible to synchronize the operation of the interactive TV application by the insertion of specialized packets into the data stream which cause an interrupt of the code currently executing in processor 210. Stream I/O 208 monitors the data stream for such specialized packets, and generates an interrupt, in a known manner, for the processor 210. Processor 210 responds to that interrupt, also in known manner, by executing an interrupt service routine (ISR). This ISR may be used for synchronization of the interactive TV application, or other purposes.

A client computer 22 in a distributed computing system as illustrated in FIG. 1 does not need a mass storage device, nor a large amount of RAM 212. Such a system decreases the cost of a client computer, and increases the functionality of the lower cost client computers. In addition, such a client computer has the option of participating in a distributed computing function, may join in the distributed computing function at any time (or may drop out and return later), and may participate at its own pace.

What is claimed is:

1. A distributed computer system comprising:

a source of a data stream providing a series of time division multiplexed packets, ones of which contain auxiliary data that represent a video program, and others of which represent a distributed computing application associated with said video program, and wherein said distributed computing application is repetitively transmitted independent of receiving client computer apparatus during times that said video program is transmitted;

a client computer, which includes a packet selector connected to said source for selecting and directing packets containing said auxiliary data representing said video program to a video signal processor and selecting and directing packets containing said associated distributed computing application to a further processor; and

said further processor including means to assemble said distributed computing application and execute said distributed computing application to form an interactive video program in which execution of said distributed computing application alters said video program.

2. The distributed computer system of claim 1 wherein said further processor includes a graphics adapter for creating graphical images and interactively combining said graphical images with said video program.

3. The distributed computer system of claim 1 wherein said video program is a television program and said further processor includes a graphics adapter for creating graphical images and interactively combining said graphical images with said television program.

4. The distributed computer system of claim 1 wherein said further processor includes a sound adapter for creating

synthesized sound and interactively combining said synthe-
sized sound with said video program.

5. The distributed computer system of claim 1 wherein
said further processor includes memory for storing program
controls and responsive thereto requests of said packet
selector a code and/or data module from the data stream.

6. A distributed computer system comprising:

a source of a time division multiplexed packet signal
including a plurality of distributed computing
applications, each distributed computing application
being repetitively transmitted independent of receiving
client computer apparatus, and each of said distributed
computing applications being in a form of a series of
packets;

a first one of packets of a respective series containing data
representing an executable code module and including
identification information indicating that the first one of
packets of said series contains data representing said
executable code module;

a second one of packets of the series contains data
representing a data module and includes identification
information indicating that said second one of packets
contains data representing the data module; and

a third one of packets of the series contains auxiliary data
and includes identification information indicating that
the third one of packets contains auxiliary data;

a client computer including a data receiver for selecting
packets of one of the plurality of distributed computing
applications, and extracting the corresponding distrib-
uted computing application representative data
included in the selected packets and applying it to
computer program controlled apparatus for executing
the extracted distributed computing application, said
data receiver extracting auxiliary data from auxiliary
packets in the data stream and supplying it to an
auxiliary data processor.

7. A distributed computer system comprising:

a data stream source producing a data stream including a
series of packets representing a plurality of time divi-
sion multiplexed signals, one of said signals including
data representing a distributed computing application,
which distributed computing application is repetitively
transmitted independent of receiving client computer
apparatus, and at least one of the packets of the signal
representing the distributed computing application
includes a directory module containing information
inter-relating packets associated with said distributed
computing application;

a client computer, receiving the data stream, extracting the
distributed computing application representative data
from the data stream, and executing the extracted
distributed computing application; and wherein

the client computer extracts said directory module from
the data stream and using data contained in the direc-
tory module extracts packets associated with said dis-
tributed computing application and builds said distrib-
uted computing application and executes said
distributed computing application.

8. The computer system of claim 7, wherein:

a first one of the series of packets contains data repre-
senting an executable code module and includes iden-

16

tification information indicating that the first one of the
series of packets contains data representing an execut-
able code module;

a second one of the series of packets contains data
representing a data module and includes identification
information indicating that the second one of the series
of packets contains data representing a data module;

a third one of the series of packets contains data repre-
senting said directory module inter-relating respective
transmitted modules associated with a single distrib-
uted computing application, and includes identification
information indicating that the third one of the series of
packets contains data representing said directory mod-
ule; and

a fourth one of the series of packets contains auxiliary
data and includes identification information indicating
that the fourth one of the series of packets contains
auxiliary data.

9. In a distributed computer system, a client computer,
comprising:

an input terminal for receiving a packet data stream
including packets of video signal time multiplexed with
packets of data representing a distributed computing
application which distributed computing application is
repetitively transmitted independently of said client
computer and at least one of the packets representing
the distributed computing application includes a direc-
tory containing information inter-relating ones of the
packets containing said distributed computing applica-
tion;

a data stream receiver, coupled to said input terminal, for
receiving the data stream, providing separate data
streams of said video signal and said distributed com-
puting application, extracting said directory packet and
responsive to the directory, extracting packets contain-
ing said distributed computing application representa-
tive data; and

a processing unit, coupled to the data stream receiver, for
assembling said distributed computing application and
executing the distributed computing application com-
prising:

a system bus;

read/write memory, coupled to the system bus;

a data stream input/output adapter, coupled between the
data stream receiver and the system bus, for receiv-
ing the extracted distributed computing application
representative data from the data stream receiver,
and storing it in the read/write memory, and having
a control output terminal coupled to the selection
control input terminal of the data stream selector, for
producing the selection control signal; and

a processor, coupled to the system bus, for controlling
the data stream input/output device to generate a
selection control signal selecting a specified one of
the plurality of data streams, and for assembling and
executing the distributed computing application
stored in the read/write memory.

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